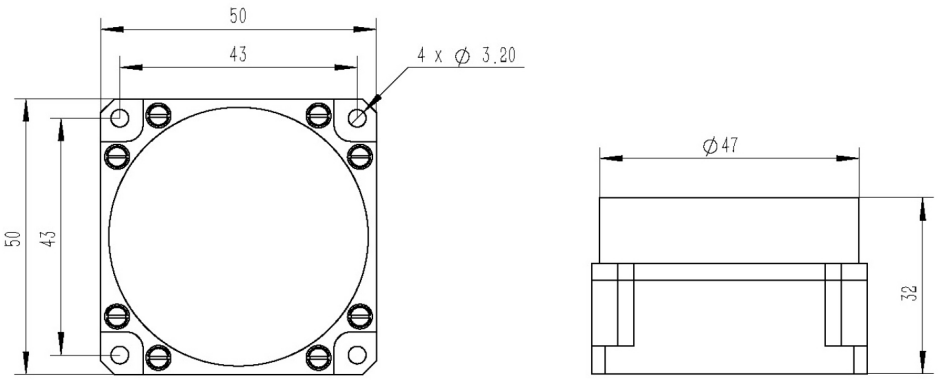
MFOG-50

MFOG-50 Fiber Optic Gyroscope

Fiber Optics Gyroscope

MFOG-50

The MFOG-50 fiber optic gyroscope is a compact all-digital closed-loop low-precision gyroscope , which has the and and tages of stable full-temperature performance , short startup time ,small size , light weight , and low power consumption Simple interface , convenient for customers to use . It is a high-priced speed sensor in the navigation control field . It can be widely used in aerospace , marine surveying and mapping, unmanned driving intelligent manufacturing and other fields



Specifications

Bias Instablility (25°C)	<0.3°/h	Power Consumption (Max)	<5W
Bias vs Temp (1°C/min)	<0.5°/h	Data Interface	Rs422
Iput Rate (Maximum)	±600°/s	Bandwidth	>200Hz
Scale Factor Non-linearity (25°C)	<100ppm	initialization Time	<3min
Scale Factor vs Temp (1°C /min)	<100ppm	Weight	<200g
Angle Random Walk (25°)	<0.02°/hr/$Hz^{1/2}$	Working temperature	-40~60℃
Power Supply	±5V	Storage temperature	-55~85℃

Feature

- Compact design
- High stability and reliability
- Strong environmental adaptability
- Low power consumption

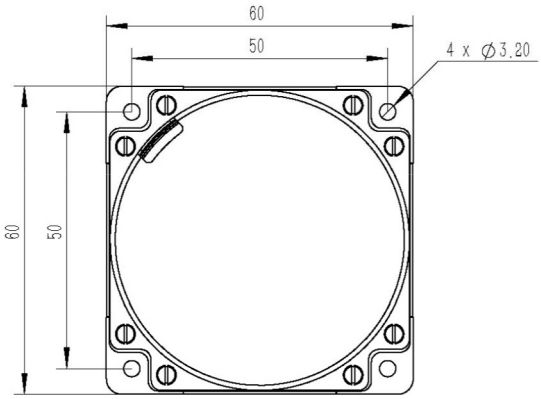
Applications

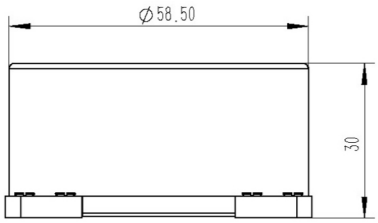
- Onboard navigation
- Naval Ship Navigation
- Unmanned Ground Vehicle (UGV)
- Remote Underwater Vehicle (ROV)
- Angular velocity sensing and control

Fiber Optics Gyroscope

MFOG-60

MFOG-60 has the advantages of low cost, large working bandwidth, high resolution, small zero drift, high linearity, short starting time, impact resistance and vibration resistance.





Specifications

Input Rate (Maximum)	-800~800 °/s	Data Interface	Rs422
Bias Instability	<0.2°/hr	Operating Temperature	-40~65℃
Bias vs Temp (1℃/min)	<0.5 °/hr	Storage temperature	-55~85℃
Scale Factor Non-Linearity (25℃)	<100ppm	Power Supply	±5V
Scale Factor vs Temp (1℃ /min)	<100ppm	Power Consumption (Max)	<5W
Angle Random Walk (25°)	<0.02°/hr/$Hz^{1/2}$	Weight	<170g
initialization Time	<3min		

Application

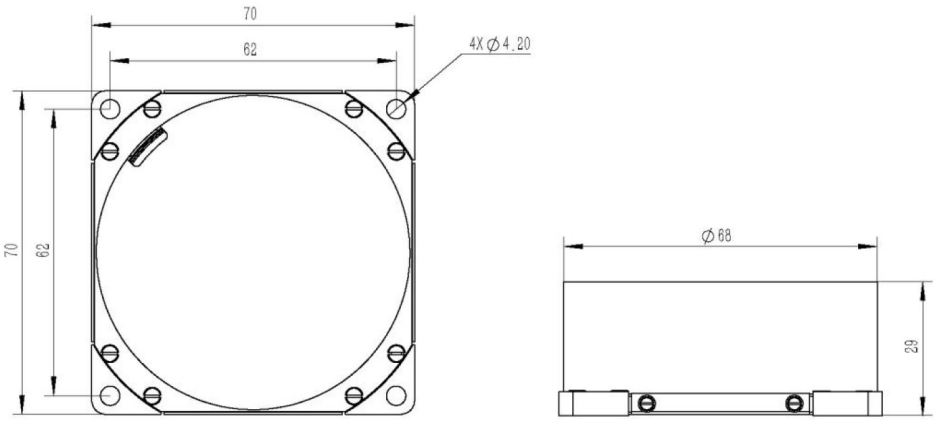
- Unmanned Aerial Vehicle (UAV)
- Unmanned Ground Vehicle (UGV)
- Camera Systems in Aircraft
- Platform Stabilization Applications

MFOG-60 Fiber Optic Gyroscope

Fiber Optics Gyroscope

MFOG-70

MFOG-70 has the advantages of low cost, large working bandwidth, high resolution, small zero drift, high linearity, short starting time, impact resistance and vibration resistance.



Specifications

Input Rate (Maximum)	-800~800 °/s	Data Interface	Rs422
Bias Instability	<0.1°/hr	Operating Temperature	-40~65℃
Bias vs Temp (1℃/min)	<0.3 °/hr	Storage temperature	-55~85℃
Scale Factor Non-Linearity (25℃)	<100ppm	Power Supply	±5V
Scale Factor vs Temp (1℃ /min)	<100ppm	Power Consumption (Max)	<5W
Angle Random Walk (25°)	<0.02°/hr/$Hz^{1/2}$	Weight	<170g
initialization Time	<3min		

Application

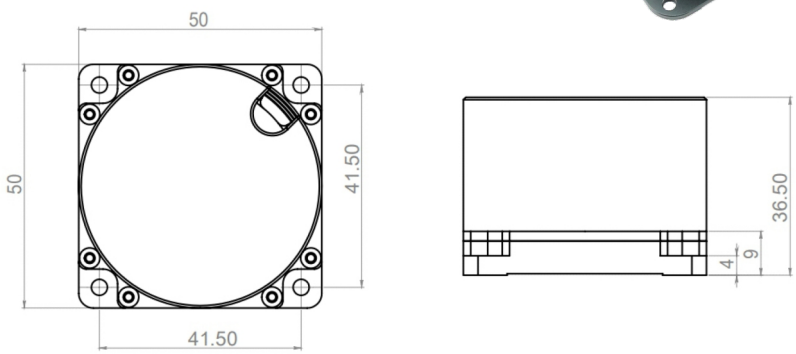
- Unmanned Aerial Vehicle (UAV)
- Unmanned Ground Vehicle (UGV)
- Camera Systems in Aircraft
- Platform Stabilization Applications

MFOG-A

MFOG-A Fiber Optic Gyroscope

MFOG-A Fiber Optic Gyroscope

The MFOG-A fiber optic gyroscope is a cost-effective standard low-precision fiber optic gyroscope. Compared to other domestic products of the same type, it has superior bias stability and temperature characteristics. At the same time, it has the characteristics of light weight, convenient use, good magnetic shielding and mature technology. It has been widely used in the fields of stability control, navigation guidance and attitude measurement.



Technical indicators

Fiber Optic Gyroscope Performance

Vibration condition	6.06g (RMS), 20—2000Hz
Bias Instability	≤0.1°/h (10 second smooth, fixed temperature point test) ≤0.1°/h (10 second smooth, fixed temperature point test removal start time 5 min) ≤0.1°/h (10 seconds smooth, -20~+65℃ temperature change test temperature change rate ≤1℃/min)
Bias repeat ability	≤0.1°/h (fixed temperature point)
Full temperature zero offset change	≤0.5°/h (-20~+65°C)
Angle Random Walk	≤0.01/√h
Bandwidth	≥500Hz
Threshold	≤0.3°/h

System Performance

Weight	≦200g
Dimensions	70mm*70mm*32mm(mounting hole spacing: 58mm)
Power Supply	±5V DC
Power Consumption (Maximum)	≤2.5W
Working Temperature	-40—+70℃
Data Interface	Rs422

Fiber Optic Gyroscope Specifications

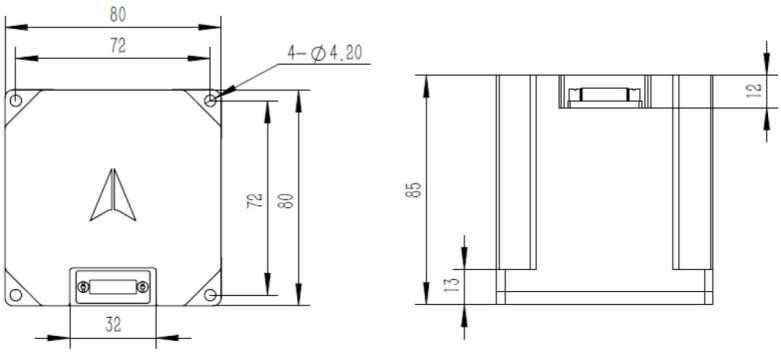
Measuring range	-1000°/s—+1000°/s
Scale factor non-linearity	≤100ppm
Scale factor asymmetry	≤100ppm
Scale factor repeat-ability	≤100ppm
Temperature scale factor variation	≤200ppm; (- - 40 + 60 ℃)
Maximum data update frequenc	≤2000Hz

MIMU-380

Inertial Measurement Unit

Inertial Measurement Unit

MIMU-380 is an IMU consisting of 3 high accuracy Fiber-based gyros, 3 high stability accelerometers in a miniature package. Each axis is factory-calibrated for bias, sensitivity and compensated for temperature effects to provide high accuracy measurements in the temperature range -40 to +70°C. The unit runs off a single 12~32V supply.



Specifications

Fiber Gyroscope	
Input Rate (Maximum)	-500~500 °/s
Bias Instability	<0.3 °/hr
Bias vs Temp (1℃/min)	<0.5 °/hr
Scale Factor Non-Linearity (25℃)	<100ppm
Angle Random Walk (25℃)	0.02°/hr/$Hz^{1/2}$
Accelerometer	
Full Scale	-10~10g
Bias Instability	<100ug/hr
Bias vs Temp (1℃/min)	<250ug/hr
Scale Factor Non-Linearity (25℃)	<100ppm
Operaturing Temperature	-40~70℃
Power Supply	12~32V